

**CLEAN COPY OF CLAIMS**

Claims 1-3 (Canceled)

Claim 4. A method for treatment of pythiosis or against pythiosis in a mammal which prophylaxis comprises:

(a) providing an injectable vaccine which comprises in a sterile aqueous solution in admixture:

(i) intracellular cytoplasmic antigens separated from disrupted cells *Pythium insidiosum* by SDS-PAGE; and

(ii) extracellular antigens secreted into a medium for growing the cells of *Pythium insidiosum* wherein the mixture comprises 28, 30 and 32 kDa antigens as determined by SDS-PAGE; and

(b) vaccinating the mammal with the vaccine.

Claim 5. The method of Claim 4 wherein the antigens have been provided by

(a) growing cells of the *Pythium insidiosum* in a culture medium and then

(i) killing the cells;

(ii) separating the killed cells from the culture medium so as to produce a first supernatant comprising the extracellular antigens secreted into the medium; and

(iii) disrupting the cells water to provide the intracellular cytoplasmic antigens in a second supernatant which is separated from the disrupted cells; and

(b) separating the extracellular antigens from the first supernatant.

Claim 6. The method of Claim 4 wherein the cells have been disrupted by sonication.

Claim 7. The method of Claim wherein the *Pythium insidiosum* is deposited as ATCC 74446.

Claim 8. The method of any one of Claims 5, 6, or 7 wherein the culture medium is Sabouraud dextrose broth.

Claim 9. The method of Claim 5 wherein the cells are killed with thimersol.

Claim 10. The method of Claim 5 wherein disrupted cells are separated from the culture medium for the cells by centrifugation.

Claim 11. The method of Claim 5 wherein the intracellular cytoplasmic antigens in the second supernatant and the extracellular antigens in the first supernatant are mixed to provide a mixture of antigens, precipitating the mixture of antigens with acetone to provide a precipitate, dissolving the precipitate in sterile distilled water to provide a solution of the antigens, and dialyzing the solution of antigens in sterile distilled water to remove low molecular weight components less than 10,000 MW to provide the vaccine.

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Claim 12. The method of Claim 4 wherein the mammal after vaccination is monitored for a change in a Th1 response and a Th2 response, wherein an increase in Th1 response and a decrease in the Th2 indicates that the mammal has developed the Th1 response to the vaccine.

Claims 13-32 (Canceled)